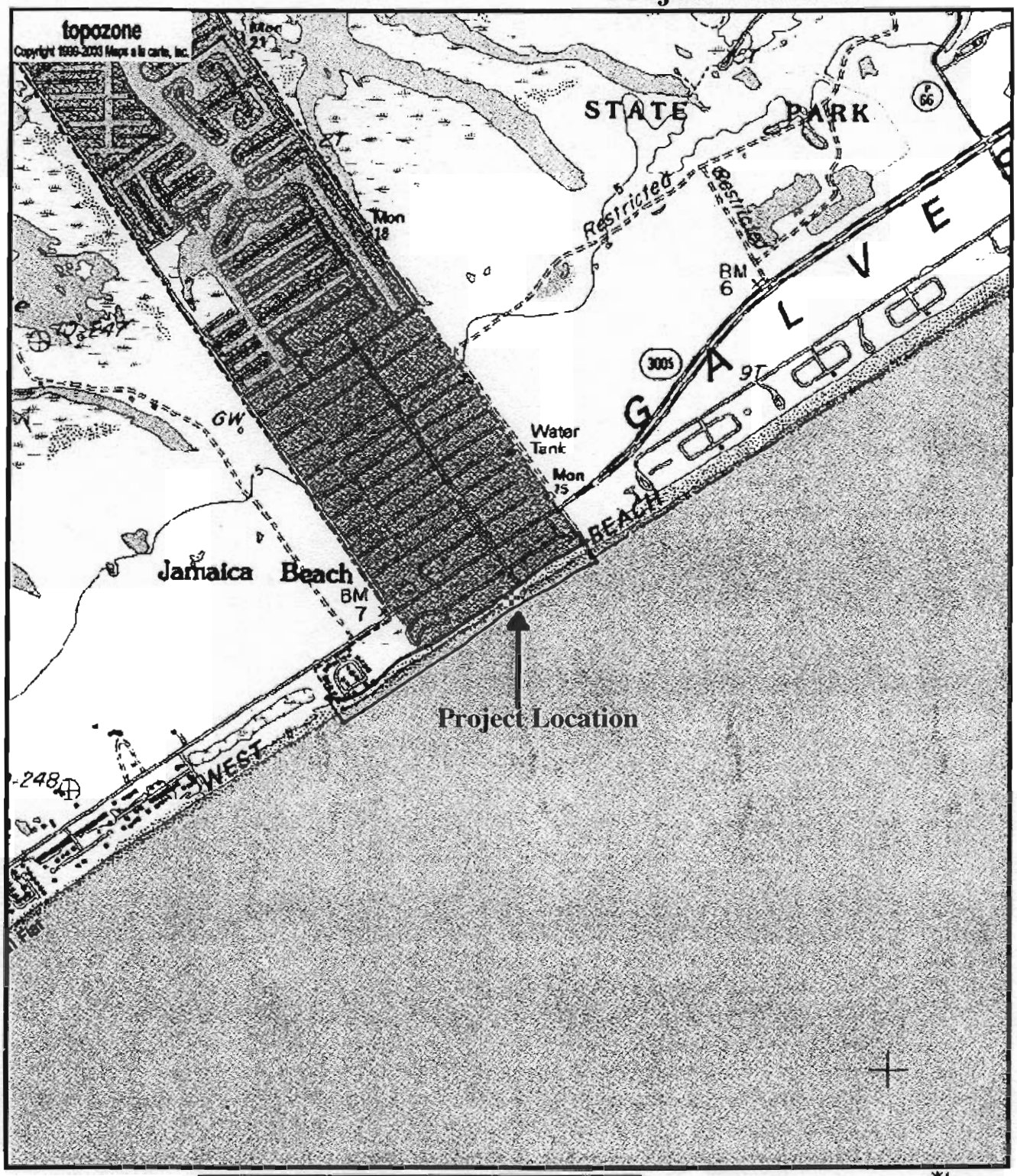
23573(01)
Project Location



0 0.3 0.6 0.9 1.2 1.5 km

0 0.2 0.4 0.6 0.8 1 mi

Map center is UTM 15 308244E 3229525N (NAD27)
1994 **Lake Como** quadrangle
Projection is UTM Zone 15 NAD83 Datum

29.1815°N, 94.9720°W (NAD27)
29° 10' 53"N, 94° 58' 19"W (NAD27)
UTM 15 308229E 3229728N (WGS84/NAD83)

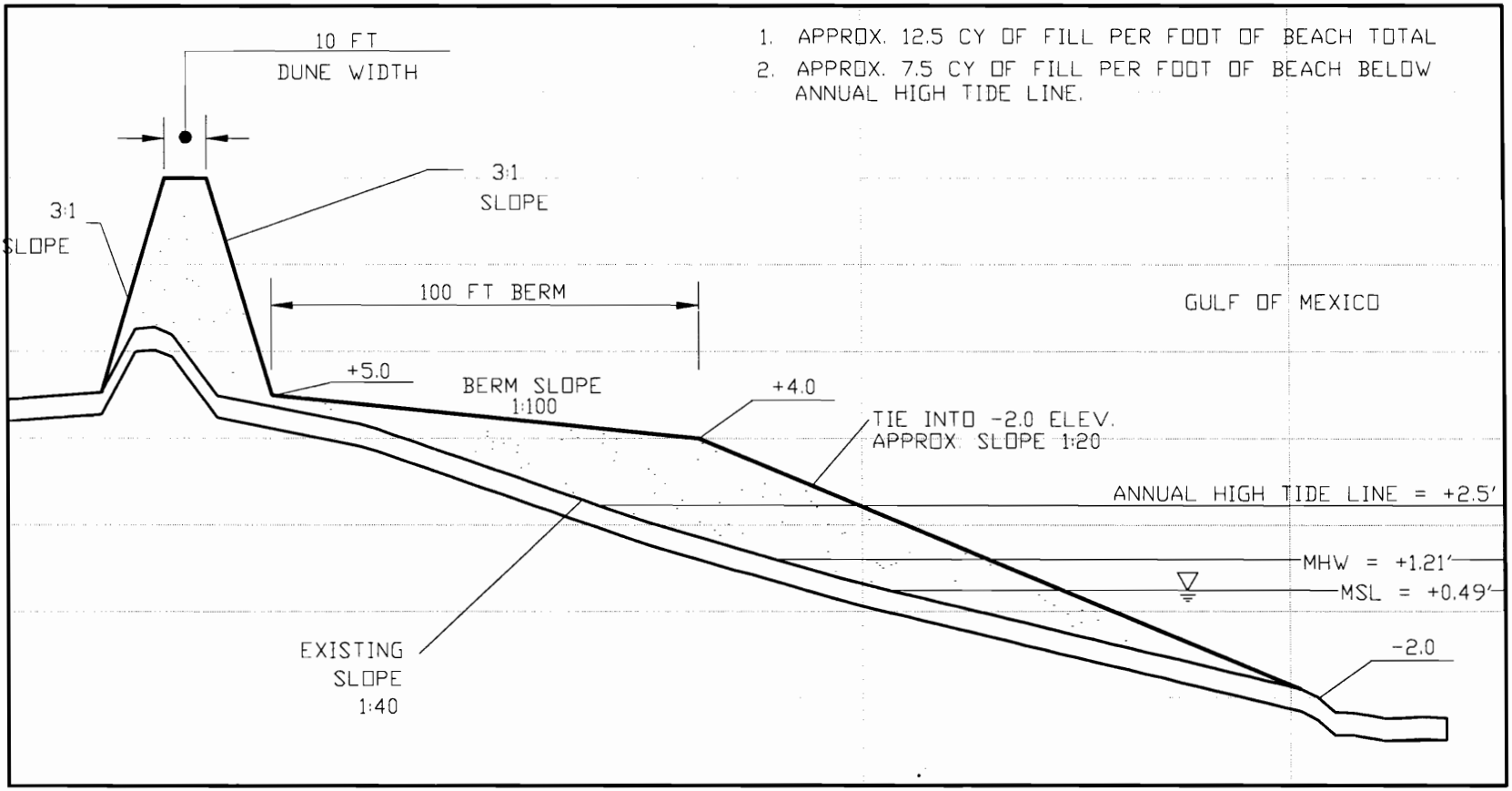
M=3.847
G=-0.962

POINT #	NORTHING	EASTING
1.	13638018.70	3254815.07
2.	13637430.10	3253987.10
3.	13636761.30	3253095.73
4.	13636030.40	3252086.36

ALL ELEVATIONS ARE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88
COORDINATES GIVEN HEREON ARE NAD 83 HORIZONTAL DATUM.

Project Plan View
Additional Information to Sheet 2 of 4 in Existing Permit 23573

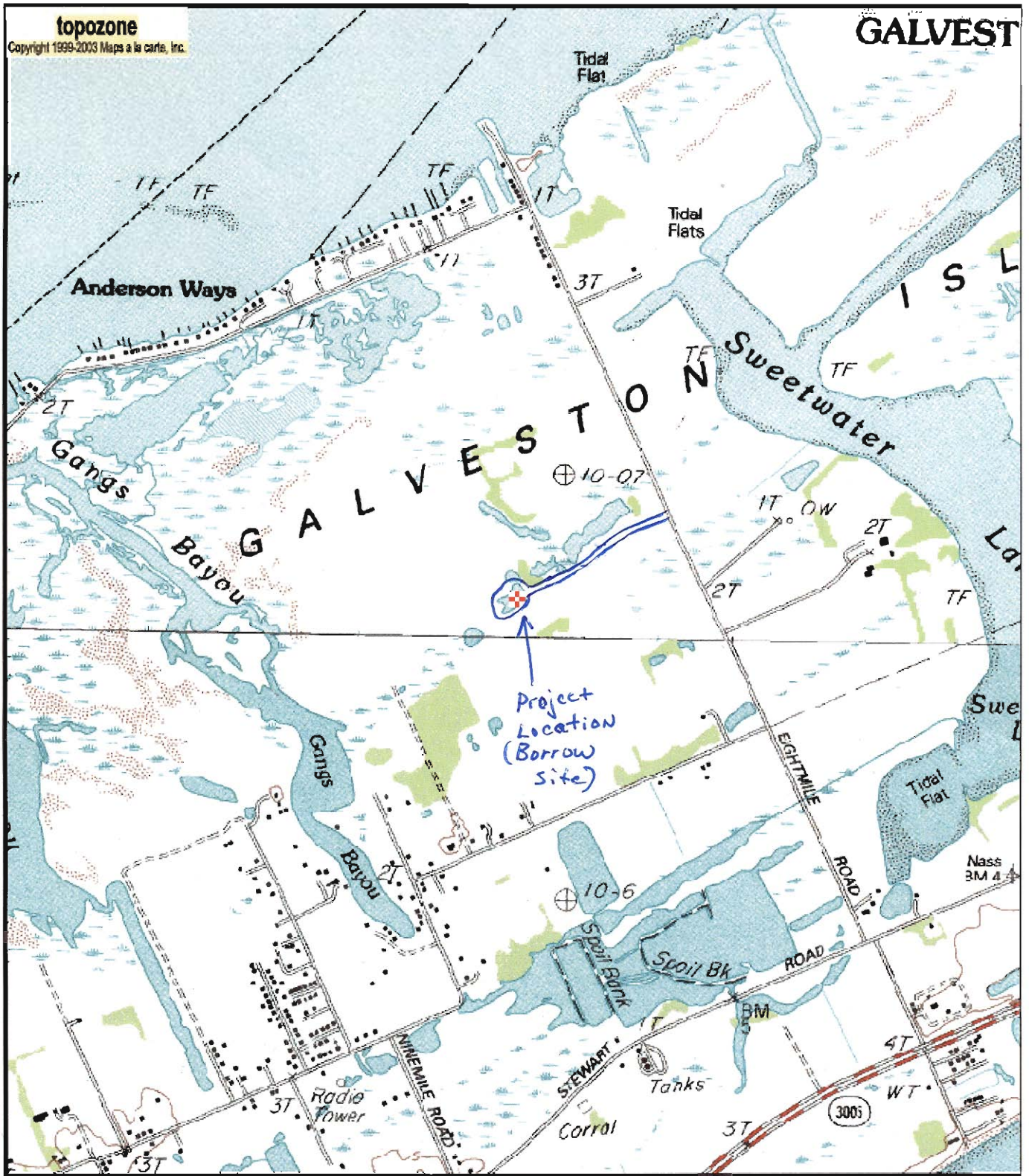
23573(01)
City of Jamaica Beach
Project Plans
Sheet 2 of 7



ALL ELEVATIONS ARE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88)

Typical Project Cross Section
Replace Sheet 3 of 4 in Existing Permit 23573

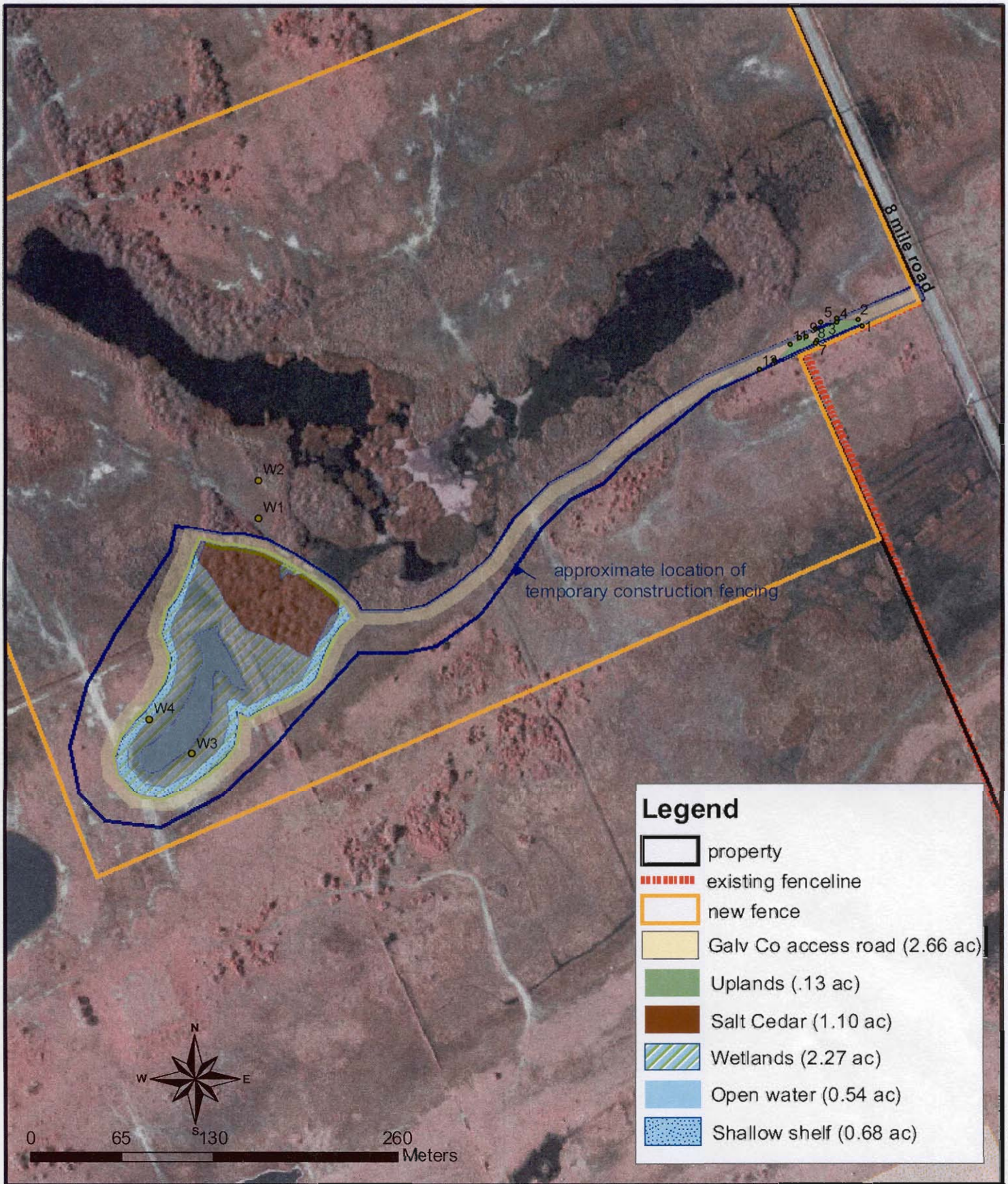
23573(01)
City of Jamaica Beach
Project Plans
Sheet 3 of 7



Map center is UTM 15 315517E 3237155N (NAD27)
Virginia Point quadrangle
Projection is UTM Zone 15 NAD83 Datum

M=3.799
G=-0.928

23573(01)
City of Jamaica Beach
Project Plans
Sheet 4 of 7



HDR | SHINER MOSELEY AND ASSOCIATES, INC.
665 N. Carancahua, Suite 1660
Corpus Christi, Texas 78478

JOB NO.: 200.50240/35419

SULLIVAN LAND & CATTLE COMPANY

HABITAT IMPACTS

PROPOSED EXCAVATION AREA

23573(01)
City of Jamaica Beach
Project Plans
Sheet 5 of 7

Jamaica Beach Nourishment

Permit Application Project Decription

Project Description

The applicant proposes to place approximately 50,000 cubic yards of beach quality sand on up to 50 acres of Gulf of Mexico beach within the project area in order to replace sand lost due to chronic erosion. The fill area includes the entire beach length within Jamaica Beach and may include adjacent areas such that end effects are minimized, for a total approximately 3,500 linear feet of beach. Fill material will be similar to native beach sand in physical properties, and will be taken from one of several sources which have been or are currently being evaluated and approved for such work. The available sand sources for this project are as follows:

1. This source for beach fill material is located on West Galveston Island along 8 mile road and is currently in the process of being permitted through the Corps by the land owner. The borrow site is described as Sullivan Ranch. As much of this information that is available at this time has been included with this permit amendment application, and includes area maps and boring logs. As additional analysis is obtained, the information will be added to this application.

Contact information for the coordinator of the Sullivan Ranch sand source is as follows:

- Sullivan Ranch
  Attn: Perry Culp
  915 Franklin, Suite 6M
  Houston, TX 77002
  Office Ph (713) 223-0113
  Fax (713) 229-8119

Impacts associated with the proposed project are similar to but less than those described in the Department of the Army Permit No. 23573 which has already been obtained for this job. The proposed beach profile will lessen the footprint and impacts of the project.

Construction Window

The applicant desires to complete the permitted activity prior to March 2006, indicating a start date of approximately March 1, 2006. No beach nourishment activities will be conducted during the Kemp's Ridley sea turtle nesting period unless proper approval has been obtained.

Methods and Equipment

Sand will be mechanically excavated, delivered by trucks and placed. Sand placement will not impede natural drainage. Beach fill material will not be placed over existing improvements such as fences and dune walkovers, nor within close proximity to houses. The project will be conducted in accordance with the plans indicated in the Department of the Army Permit No. 23573, with the exception of replacing sheets 3 and 4 with attached diagrams. The modified replacement diagrams represent a smaller proposed beach nourishment template profile for this project and different borrow areas for beach quality sand to be used.

The slope of the placed material shall not exceed 3H:1V. Material placed below the high tide line will be placed at a nominal slope of 20H:1V. The anticipated formation of erosion scarps will be managed and minimized using BMPs such as raking and grading as needed.

If the first or second sand source is utilized for this project, multiple trucks will be used to transport the sand approximately 10 to 12 miles along FM 3005 to the project area. The trucks will use public streets and existing public beach access points to deliver the sand to the beach. Machinery such as bulldozers and graders will spread and smooth the material per the design template.

Materials and equipment required for the project will be staged in upland areas and transported as needed to the work site. A staging area landward of the beach on public street right of way is indicated in the attached plans. Temporary overnight storage of earth moving equipment of the beach may be necessary. BMPs will be incorporated for equipment temporarily stored on the beach, e.g., sorbent pads beneath engines for oil and fluid control. The number of vehicles transiting the beach will be kept to a minimum. Vehicles will use the same pathway whenever possible, and access will be confined to the immediate needs of the proposed project.

After the project is completed, any mud or wind tidal flats or project sites seaward of mean high tide will be restored to pre-construction slope or contours, and all ruts will be leveled within seven days of completion of work. Within designated critical habitat (Unit TX-34) for the piping plover, ruts in the beach sand resulting from construction activities, including trucks, will be leveled at the end of each construction day.

Material Quality

To protect the environmental functions of Texas beaches, only beach compatible fill shall be placed on the each or in any associated dune system. Beach compatible fill is material that maintains the general character and functionality of the naturally occurring material on the beach and in the adjacent dune and coastal system.

Such material shall be composed of at least 75% quartz (mono- and polycrystalline quartz, plus chert), with the remainder of the fill material predominantly carbonate, feldspar, or lithic fragments. The material shall have a median grain size between 0.1 and 0.3 mm, shall be similar in color and grain size distribution to the material in the existing coastal system at the placement site and shall not contain:

- Greater than 10%, by weight, of silt, clay, or colloids passing the #230 sieve (0.63mm);
- Greater than 5%, by weight, of fine gravel retained on the #4 sieve (4.76 mm);
- Coarse gravel, cobbles, or material retained on the ¾" sieve in a percentage of size greater than found on the native beach;
- Construction debris or toxic, hazardous, or deleterious material or other foreign matter; and
- Shall not result in cementation of the beach.

A Tier II 401 Certification Questionnaire and Alternatives Analysis Checklist from the Texas Natural Resource Conservation Commission (TNRCC – Now TCEQ) had been completed for the previous permit application, and are attached to this application as well.